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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/429,406	10/26/1999	JAMES M. BROWN	000029	5890

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QUALCOMM INCORPORATED
5775 MOREHOUSE DR.
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EXAMINER	
WILSON, ROBERT W	
ART UNIT	PAPER NUMBER
2619	

NOTIFICATION DATE	DELIVERY MODE
11/09/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	09/429,406	BROWN ET AL.	
	Examiner	Art Unit	
	Robert W. Wilson	2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 September 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *4,5 and 12-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *4,5 and 12-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 4-5, 12-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Referring to claims 4, 13, 14, & 17; the specifications on Page 8 line 14 to Pg 9 line 13 states that "a 2nd segment size which represents the maximum segment is negotiated prior to transmission". The specification teaches a segment is sent between the transmitter and receiver upon receipt of an acknowledgment by the transmitter and there is no negotiation on this segment prior to transmission. This segment corresponds to the second segment that applicant is claiming in claims 4, 13, 14, & 17; therefore, applicant is claiming a limitation which is new matter and not enabled by the specification. Where is the following limitation defined in the specification" the second segment size is negotiated between the transmitter and the receiver prior to start of communications"?

Referring to claims 14 & 17, the applicant's original set of claims did not claim four separate means. Applicant's original claims only specified one of the means. Applications drawings at most show a TCP Processor and a Processor per Fig 1 which are at most two means. Where in the applicant's specification or drawings are " means for defining min, means for defining maximum, means for generating a first segment, and means for generating a second segment shown. In other words the applicant needs to clarify where in the specification all of the means are independently defined.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 13 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to claim 13, what is meant by a computer readable medium? Applicant's original set of claims did not claim a computer program nor did they claim a computer readable medium; consequently, the specification lacks antecedent basis for computer readable medium. The examiner points out that the applicant's specification does teach: "a microprocessor which is running a computer program " on Pg 6 lines 38-39 of applicant's specification. Additionally on Pg 5 lines 27-30 of applicant's specification "preprogrammed instruction set on an ASIC " is taught. Computer readable medium is never mentioned in the applicant's specification; therefore, the examiner cannot assess the metes and bounds of the claims.

Drawings

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Applicants Figures do not show the four separate means ie. the applicant's original set of claims did not claim four separate means. Applicant's original claims only specified one of the means. Applications drawings at most show a TCP Processor and a Processor per Fig 1 which is at most two means. The applicant's drawing need to show " means for defining min, means for defining maximum, means for generating a first segment, and means for generating a second segment. Therefore, the four means must be shown or the four means feature(s) must be canceled from the claims 14-17. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure

must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

6. Applicant's specification is objected to because applicant has not defined all related applications to this case. As a minimum application 10/345,002 is related to this application should be described in the specification.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 4 & 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer (U.S. Patent No.: 6,700,902) in view of Mangin (U.S. Patent No.: 6,925,060)

Referring to claim 4, Meyer teaches: An apparatus (transmitter/receiver 20 per Figure 4 or transmitter) for generating at least one segment of time-sensitive information (string of data or 65A per Figure 5) comprising:

a queue for storing the data frames, the data frames representing time-sensitive information (24 per Figure 4 is capable of storing string of data or data frames representing time-sensitive information per Figure 5) and

a first processor for generating a first segment of time-sensitive information if sufficient quantity of the time-sensitive information is available for transmission, the first segment having a segment of time sensitive information having a segment size between a pre-defined minimum segment size and a predefined maximum segment size the first segment size is pre-stored in a memory of a transmitter (23 per Figure 4 or first processor generates a first packet containing string of data or time sensitive information which is between the minimum allowable packet size (pre-defined minimum) and maximum allowable packet size (pre-defined maximum) which is a packet which is dynamically being adjusted to the maximum operational size and the first segment size is inherently prestored in memory of the transmitter per col. 9 line 57 to col. 13 line 11)

and generating a second segment of time sensitive information having a segment size less than or equal to the pre-defined maximum segment size upon receipt of an acknowledgement message where in the first segment size is different from the second segment size (The reference teaches that upon receipt of the ACK the generated second segment size of the packet stays the same as the previously sent maximum operational size packet sent per col. 9 line 57 to col. 13 line 11. The reference teaches dynamically adjusting the size for sending a maximum operational size packet based upon changing BER per col. 11 lines 56 to 67 which would be to make the second segment size different in order to adjust the size of the segment dynamically based upon changing BER

Meyer does not expressly call for: segment size negotiated between the transmitter and receiver prior to start of the communication:

Mangin teaches: segment size negotiated between the transmitter and receiver prior to start of the communication (col. 1 lines 38-41)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the segment size negotiated between the transmitter and receiver prior to start of the communication of Mangin to the second segment of Meyer in order for the transmitter and receiver to synchronize between each other in order to improve performance.

In addition Meyers teaches:
Regarding claim 15, wherein the apparatus is implemented in a base station (col. 8 lines 40)

Referring to claim 12, Meyer teaches: A method for generating at least one segment of time-sensitive information (Figure 9 shows the method of generating (130 per Figure 9) time sensitive information (string of data or 65A per Figure 5) comprising

Pre-defining a minimum segment size for information to be transmitted (the minimum allowable packet or minimum pre-defined segment size per col. 9 line 57-col. 10 line 35);

Pre-defining a maximum segment size for information to be transmitted, the maximum segment size being greater than the minimum segment size (The maximum allowable packet size or predefined maximum segment size per col. 9 line 57-col. 10 line 35)

generating a first segment of time-sensitive information if a sufficient quantity of the time-sensitive information is available for transmission, the first segment having a segment size between the minimum segment size and the maximum segment size wherein the first segment size is pre-stored in a memory of a transmitter (A first packet is created from the string of data or time-sensitive information per Figure 5 the first packet size is between the minimum allowable and maximum allowable packet size the first segment size is inherently pre-stored in memory per col. 9 line 57-col. 10 line 35); and

generating a second segment of time sensitive information having a segment size less than or equal to the maximum segment size upon the receipt of an acknowledgment message from the receiver wherein the first segment size is different from the second segment size (A second packet size or second segment is generated from the string of data per Figure 5 which equal to the maximum operational packet size previously sent upon an acknowledgment message from the transmitter/receiver or 20 per col. 9 line 57-col. 10 line 35 based upon ACK message from receiver per 110, 115, 120, 125, 130, 133, 135, 138, & 140 per Figure 8 & per col. 9 line 57 to col. 13 line 11. The reference teaches: dynamically adjusting the size for sending a maximum operational size packet based upon changing BER per col. 11 lines 56 to 67 which the examiner interprets as sending a second segment of a different size upon acknowledgement.)

Meyer does not expressly call for: segment size negotiated between the transmitter and receiver prior to start of the communication:

Mangin teaches: segment size negotiated between the transmitter and receiver prior to start of the communication (col. 1 lines 38-41)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the segment size negotiated between the transmitter and receiver prior to start of the communication of Mangin to the second segment of Meyer in order for the transmitter and receiver to synchronize between each other in order to improve performance.

Referring to claim 13, Meyer teaches: A method for generating at least one segment of time-sensitive information (Figure 9 shows the method of generating (130 per Figure 9) time sensitive information (string of data or 65A per Figure 5) comprising

defining a minimum segment size for information to be transmitted (the minimum allowable packet or minimum defined segment size per col. 9 line 57-col. 10 line 35);

defining a maximum segment size for information to be transmitted, said maximum segment size being greater than the minimum segment size (The maximum allowable packet size or defined maximum segment size per col. 9 line 57-col. 10 line 35)

generating a first segment of time-sensitive information if sufficient quantity of the time-sensitive information is available for transmission, the first segment having a segment size between the minimum segment size and the maximum segment size wherein the first segment size is pre-stored in a memory of a transmitter (A first packet is created from the string of data or time-sensitive information per Figure 5 the first packet size is between the minimum allowable and maximum allowable packet size the first segment size is inherently prestored in memory per col. 9 line 57-col. 10 line 35);

and generating a second segment of time sensitive information having a segment size less than or equal to the maximum segment size upon the receipt of an acknowledgment message from said receiver wherein the first segment size is different form the second segment size (A second packet size or second segment is generated from the string of data per Figure 5 which equal to the maximum operational packet size previously sent upon an acknowledgment message from the transmitter/receiver or 20 per col. 9 line 57-col. 10 line 35 based upon ACK message from receiver per 110, 115, 120, 125, 130, 133, 135, 138, & 140 per Figure 8 & per col. 9 line 57 to col. 13 line 11. The reference teaches: dynamically adjusting the size for sending a maximum operational size packet based upon changing BER per col. 11 lines 56 to 67 which the examiner interprets as sending a second segment of a different size upon acknowledgement.)

Meyer does not expressly call for: segment size negotiated between the transmitter and receiver prior to start of the communication:

Mangin teaches: segment size negotiated between the transmitter and receiver prior to start of the communication (col. 1 lines 38-41)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the segment size negotiated between the transmitter and receiver prior to start of the communication of Mangin to the second segment of Meyer in order for the transmitter and receiver to synchronize between each other in order to improve performance.

The combination of Meyer and Mangin do not expressly call for: a computer readable medium which stores instructions.

It is within the level of one skilled in the art at the time of the invention to implement the method of Meyer and Mangin described above in program instructions which are executable on a processor.

It would have been obvious to one of ordinary skill in the art at the time of the invention to store these instructions on a computer readable medium in order for the instructions to be executable on a processor.

Referring to claim 14, Meyer teaches: An apparatus (transmitter/receiver 20 per Figure 4 or transmitter) that generates at least one time-sensitive information (string of data or 65A per Figure 5) comprising:

means for defining a minimum segment size for information to be transmitted (23 per Figure 4 is capable of being the means for defining a minimum packet size or minimum segment size per col. 9 line 57-col. 10 line 35);

means for defining a maximum segment size for information to be transmitted (23 per Figure 4 is capable of being the means for defining maximum packet size or segment size to be transmitted per Figure 8); the maximum segment size being greater than the minimum segment size wherein the first segment size is pre-stored in a memory of a transmitter (The packet size or maximum segment size is between a minimum and maximum packet size and the first segment size is inherently pre-stored per col. 9 line 57-col. 10 line 35.)

means for generating a first segment of time-sensitive information if sufficient quantity of the time-sensitive information is available for transmission (23 per Figure 4 is capable of being the means for generating a first packet containing string of data or time sensitive information if the size of the segment is greater than the minimum packet size per col. 9 line 57-col. 10 line 35), the first segment having a segment size between the minimum segment size and the maximum segment size wherein the first segment size is pre-stored in a memory of a transmitter (The size of the packet or segment size is between a minimum and maximum packet size and the first segment size inherently pre-stored in the memory of a transmitter per col. 9 line 57-col. 10 line 35);

means for generating a second segment of time sensitive information having a segment size less than or equal to said maximum segment size upon the receipt of an acknowledgment message from said receiver wherein the first segment size is different form the second segment size (23 per Figure 4 or means for generating a second packet size or second segment is generated from the string of data per Figure 5 which is equal to the maximum operational packet size which was previously sent upon an acknowledgment message from the transmitter/receiver or 20 per col. 9 line 57-col. 10 line 35 based upon ACK message from receiver per 110, 115, 120, 125, 130, 133, 135, 138, & 140 per Figure 8 & per col. 9 line 57 to col. 13 line 11. The reference teaches: dynamically adjusting the size for sending a maximum operational size packet based upon changing BER per col. 11 lines 56 to 67 which the examiner interprets as sending a second segment of a different size upon acknowledgement.)

Meyer does not expressly call for: segment size negotiated between the transmitter and receiver prior to start of the communication:

Mangin teaches: segment size negotiated between the transmitter and receiver prior to start of the communication (col. 1 lines 38-41)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the segment size negotiated between the transmitter and receiver prior to start of the communication of Mangin to the second segment of Meyer in order for the transmitter and receiver to synchronize between each other in order to improve performance.

In addition Meyers teaches:
Regarding claim 16, wherein the apparatus is implemented in a base station (col. 8 lines 40)

Referring to claim 17, Meyer teaches: An processor (transmitter/receiver 20 per Figure 4 or transmitter) that generates at least one time-sensitive information (string of data or 65A per Figure 5) comprising:

means for defining a minimum segment size for information to be transmitted (23 per Figure 4 is capable of being the means for defining a minimum packet size or minimum segment size per col. 9 line 57-col. 10 line 35);

means for defining a maximum segment size for information to be transmitted (23 per Figure 4 is capable of being the means for defining maximum packet size or segment size to be transmitted per Figure 8);the maximum segment size being greater than the minimum segment size (The packet size or maximum segment size is between a minimum and maximum packet size per col. 9 line 57-col. 10 line 35)

means for generating a first segment of time-sensitive information if sufficient quantity of the time-sensitive information is available for transmission (23 per Figure 4 is capable of being the means for generating a first packet containing string of data or time sensitive information if the size of the segment is greater than the minimum packet size per col. 9 line 57-col. 10 line 35), the first segment having a segment size between the minimum segment size and said maximum segment size, wherein the first segment size is pre-stored in memory of a transmitter (The size of the packet or segment size is between a minimum and maximum packet size and inherently pre-stored in memory per col. 9 line 57-col. 10 line 35);

means for generating a second segment of time sensitive information having a segment size less than or equal to said maximum segment size upon the receipt of an acknowledgment message from said receiver wherein the first segment size is different form the second segment size (23 per Figure 4 or means for generating a second packet size or second segment is generated from the string of data per Figure 5 which is equal to the maximum operational packet size which was previously sent upon an acknowledgment message from the transmitter/receiver or 20 per col. 9 line 57-col. 10 line 35 based upon ACK message from receiver per 110, 115, 120, 125, 130, 133, 135, 138, & 140 per Figure 8 & per col. 9 line 57 to col. 13 line 11). The reference teaches dynamically adjusting the size for sending a maximum operational size packet based upon

changing BER per col. 11 lines 56 to 67 which the examiner has interprets as sending a second segment of a different size upon acknowledgement.

Meyer does not expressly call for: segment size negotiated between the transmitter and receiver prior to start of the communication:

Mangin teaches: segment size negotiated between the transmitter and receiver prior to start of the communication (col. 1 lines 38-41)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the segment size negotiated between the transmitter and receiver prior to start of the communication of Mangin to the second segment of Meyer in order for the transmitter and receiver to synchronize between each other in order to improve performance.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer (U.S. Patent No.: 6,434,140) in view of Mangin (U.S. Patent No.: 6,925,060) further in view of Barany (U.S. Patent No.: 6,434,140).

Referring to claim 5, the combination of Meyer and Mangin teaches: the apparatus of claim 4

The combination of Meyer and Mangin do not expressly call for: further comprising a vocoder for generating data frames from said time sensitive information.

Barany teaches: vocoder which generates packet switched data from voice or a vocoder for generating data frames from said time sensitive information per col. 4 lines 32-39.

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the vocoder of Barany to the mobile of Meyer and Mangin in order to convert voice into packet data which would be in compliance with the GPRS-136 standard.

Response to Amendment

11. Applicant's arguments with respect to claims 4-5 & 12-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W. Wilson whose telephone number is 571/272-3075. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571/272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Robert W Wilson
Examiner
Art Unit 2619

RWW

11/1/07